CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION SUMMARY OF PUBLIC COMMENTS EXPLANATORY STATEMENT FOR FINAL REGULATIONS

Proposed amendments to sections 26-306-4, 26-306-5, and 26-306-6 of the Regulations of Connecticut State Agencies.

Proposed Amendments to Endangered, Threatened, and Species of Special Concern

STATEMENT OF PURPOSE: As authorized pursuant to CGS section 26-306, the proposed amendments are to update the lists of species which are endangered, threatened or of special concern. Pursuant to CGS 26-307, the commissioner of the Department of Environmental Protection (DEEP) is required to review, at least every five years, the designation of species to determine whether species should be: (1) Added or removed from the list; or, if necessary, (2) change the designation.

The Department held a public hearing to receive comments on the proposed amendment on March 31, 2015. The hearing record was open until April 14, 2015 at 4:30 pm for submission of written comments. Following is the wording of the proposed amendment as presented at the public hearing, a summary of comments received and the Department's responses, and the recommended final wording for the amendment.

Proposed Amendments at Time of Public Hearing of March 31, 2015

Section 1. Section 26-306-4 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-4. List of endangered species

(a) The following mammal species are determined to be endangered:

Cryptotis parva Least shrew

Myotis leibii Eastern small-footed bat

Myotis lucifugus Little brown bat

Myotis septentrionalis Northern long-eared bat

Myotis sodalis
Perimyotis subflavus
Indiana bat
Tri-colored bat

(b) The following bird species are determined to be endangered:

Accipiter striatus
Ammodramus savannarum
Asio otus
Bartramia longicauda
Sharp-shinned hawk
Grasshopper sparrow
Long-eared owl
Upland sandpiper

Botaurus lentiginosus
Chordeiles minor
Common nighthawk
Circus cyaneus
Cistothorus platensis
Eremophila alpestris
Callingla ahlaranya

Gallinula chloropus Common moorhen Icteria virens Yellow-breasted chat

[Laterallus jamaicensis] [Black rail]

[(nesting population only)]

Melanerpes erythrocephalus Red-headed woodpecker

Podilymbus podiceps Pied-billed grebe Pooecetes gramineus Vesper sparrow Rallus elegans King rail

(nesting population only)

Sterna dougallii Roseate tern Tyto alba Barn owl

Vermivora chrysoptera Golden-winged warbler

(c) The following reptile species are determined to be endangered:

Crotalus horridus Timber rattlesnake

Dermochelys coriacea Leatherback
Glyptemys muhlenbergii Bog turtle
Lepidochelys kempii Atlantic ridley

(d) The following amphibian species are determined to be endangered:

Ambystoma laterale Blue-spotted salamander

(diploid populations)

Scaphiopus holbrookii Eastern spadefoot

(e) The following fish species are determined to be endangered:

Acipenser brevirostrum Shortnose sturgeon
Acipenser oxyrinchus oxyrinchus Atlantic sturgeon

[Lampetra] Lethenteron appendix American brook lamprey

Lota lota Burbot

Osmerus mordax Rainbow smelt

(anadromous populations only)

(f) The following invertebrate species are determined to be endangered:

Alasmidonta heterodon Dwarf [wedge mussel] wedgemussel

Alasmidonta varicosa Brook floater

Amblyscirtes vialis Common roadside skipper

Anarta luteola Noctuid moth

Apodrepanulatrix liberariaNew Jersey tea inchwormCalephelis borealisNorthern metalmarkCallophrys hesseliHessel's hairstreakCatocala herodias gerhardiHerodias underwing

Celastrina neglectamajor Appalachian blue Chytonix sensilis Barrens Chytonix Cicindela lepida Dune ghost tiger beetle Cicindela puritana Puritan tiger beetle Epeoloides pilosula Macropis cuckoo Columbine duskywing Erynnis lucilius Erynnis persius persius Persius duskywing Eubaphe meridiana Little beggar Eubranchipus holmanii Fairy shrimp

Euphyes bimacula Two-spotted skipper Grammia phyllira Phyllira tiger moth Grammia speciosa Bog tiger moth Haematopota rara Lace-winged horse fly Hemileuca maia maia [Buck] Barrens buck moth

Horse fly Hybomitra longiglossa

Lampsilis cariosa Yellow [lamp mussel] lampmussel Magicicada septendecula Little 17-year periodical cicada [Metarranthis apiciaria] [Barrens metarranthis moth]

[Papaipema appassionata] [Pitcher plant borer] Papaipema leucostigma Columbine borer Papaipema marginidens Brick-red borer moth

Phyllonorycter ledella Labrador tea tentiform leafminer

Schinia gracilenta Slender flower moth Speyeria atlantis Atlantis fritillary butterfly Tibicen auletes Northern dusk-singing cicada Williamsonia lintneri [Banded bog skimmer] Ringed

> boghaunter Black-eved zale

Zale curema

(g) The following plant species are determined to be endangered:

Abies balsamea Balsam fir

(native populations only)

Sandplain [gerardia] agalinis Agalinis acuta

Agastache nepetoides Yellow giant hyssop Agastache scrophulariifolia Purple giant hyssop Ageratina aromatica Small white snakeroot Angelica lucida Sea-coast angelica Arceuthobium pusillum Dwarf mistletoe Aristida purpurascens Arrowfeather Aristida tuberculosa Beach needle grass Green milkweed Asclepias viridiflora Bidens eatonii Eaton's beggarticks

Bouteloua curtipendula [Side-oats]Sideoats grama-grass

Broadwing sedge Carex alata Carex backii [Sedge] Back's sedge

Carex barrattii Barratt's sedge Carex buxbaumii Brown bog sedge
Carex castanea Chestnut-colored sedge
Carex exilis [Sedge] Meager sedge
Carex magellanica [Sedge] Boreal bog sedge

Carex polymorpha
Carex pseudocyperus
Carex reznicekii
Carex schweinitzii
Carex viridula
Carex viridula
Carex willdenowii

Chamaelirium luteum Devil's-bit
Cheilanthes lanosa Hairy lip-fern
Cirsium horridulum Yellow thistle

Coeloglossum viride Long-bracted green orchid

Crassula aquatica Pygmyweed

Cryptogramma stelleri Slender cliff-brake Cypripedium reginae Showy lady's-slipper

[Dalibarda repens] [Dew-drop]

Desmodium cuspidatum Large-bracted tick-trefoil [Desmodium humifusum] [Trailing tick-trefoil]

Dichanthelium scabriusculum [Panic grass] Tall swamp rosette-panic grass

Diplazium pycnocarpon Narrow-leaved glade fern Dryopteris campyloptera Mountain wood-fern

Echinodorus tenellus Bur-head

Eleocharis equisetoides [Horse-tail spike-rush]<u>Horsetail spikesedge</u>
Eleocharis quadrangulata var. crassior [Spike-rush]<u>Square-stemmed spikesedge</u>

Equisetum pratense Meadow horsetail
Equisetum scirpoides Dwarf scouring rush
Eriocaulon parkeri Parker's pipewort
Eupatorium album White thoroughwort

Eurybia radula Rough aster

Floerkea proserpinacoides False mermaid-weed

Galium labradoricum Bog bedstraw Gentianella quinquefolia Stiff gentian

[Hasteola suaveolens] [Sweet-scented Indian-plantain]

Hudsonia ericoides Golden-heather

Hydrastis canadensis [Golden seal]Goldenseal

Hydrocotyle umbellata Water pennywort
Hydrocotyle verticillata Whorled pennywort
Isotria medeoloides Small whorled pogonia

Lachnanthes [caroliana] <u>caroliniana</u> Carolina redroot

(native populations only)

Leptochloa fusca ssp. fascicularis Saltpond grass

Ligusticum [scothicum]scoticum Scotch lovage
Linnaea borealis ssp. americana Twinflower
Linum sulcatum Yellow flax

Liparis liliifolia Lily-leaved twayblade

Ludwigia sphaerocarpa Globe-fruited false-loosestrife

Lycopodiella alopecuroides Foxtail clubmoss Lythrum alatum Winged loosestrife

[Malaxis bayardii] [Bayard's white adder's mouth]

Malaxis brachypoda White adder's-mouth
Malaxis unifolia Green adder's-mouth
Milium effusum Tall millet-grass
Minuartia glabra Mountain sandwort
Moehringia macrophylla Large-leaved sandwort
Moneses uniflora One-flower wintergreen

[Morus rubra][Red mulberry]Muhlenbergia capillarisLong-awn hairgrassMyriophyllum alterniflorumSlender water-milfoilMyriophyllum pinnatumCutleaf water-milfoil

[Oclemena X blakei] [Blake's aster]
Oclemena nemoralis Bog aster

Oligoneuron album Prairie goldenrod
Oligoneuron rigidum Stiff goldenrod
Onosmodium virginianum Gravel-weed

Ophioglossum pusillumNorthern adder's-tongueOphioglossum vulgatumSouthern adder's-tongue

Packera anonymaSmall's ragwortPackera pauperculaBalsam groundsel[Paspalum laeve][Field paspalum]Pellaea glabellaSmooth cliff-brake

Pinus resinosa Red pine

(native populations only)

Piptatherum pungens Slender mountain ricegrass
Pityopsis falcata Sickle-leaved golden aster
Platanthera blephariglottis White-fringed orchid
Platanthera ciliaris Yellow-fringed orchid

Polygala cruciata

[Polygala nuttallii]

Polygala senega

Polymnia canadensis

Field milkwort

[Nuttall's milkwort]

Seneca snakeroot

Small-flowered leafcup

Potamogeton confervoides [Pondweed]Tuckerman's pondweed

Potamogeton friesii Fries' pondweed
Potamogeton hillii Hill's pondweed
Potamogeton ogdenii Ogden's pondweed

Potamogeton strictifolius Straight-leaved pondweed

[Pycnanthemum clinopodioides][Basil mountain-mint]Pycnanthemum torreiTorrey mountain-mintRanunculus ambigensWater-plantain spearwort

Ranunculus cymbalaria Seaside crowfoot

Rhynchospora capillacea [Capillary beak-rush]Needle beaksedge Rhynchospora scirpoides Long-beaked [bald rush]beaksedge

Ribes triste Swamp red currant

Rubus dalibardaDew-dropSabatia stellarisMarsh pink

Sagittaria cuneata [Waputo]Northern arrowhead

Sagittaria teres Quill-leaved arrowhead

Salix exiguaSandbar willowSalix pedicellarisBog willowSaururus cernuusLizard's tailScheuchzeria palustris ssp. americanaPod grass

Scleria pauciflora var. caroliniana Few-flowered nutrush
Scleria reticularis Reticulated nutrush
Scleria triglomerata [Nutrush]Whip nutrush

Scutellaria integrifolia Hyssop skullcap Scutellaria parvula var. missouriensis Small skullcap

<u>Senecio suaveolens</u> <u>Sweet-scented Indian-plantain</u>

Sparganium fluctuansFloating bur-reedSparganium natansSmall bur-reedSporobolus clandestinusRough dropseedSporobolus heterolepisNorthern dropseedSporobolus neglectusSmall dropseed

Stachys hyssopifolia Hyssop-leaf hedge-nettle

Taenidia integerrima Yellow pimpernel Trichostema brachiatum False pennyroyal

Triosteum angustifolium Narrow-leaved horse gentian

Triphora trianthophora Nodding pogonia
Trisetum spicatum Narrow false oats

Utricularia resupinata [Bladderwort]Resupinate bladderwort

Uvularia grandifloraLarge-flowered bellwortVaccinium myrtilloidesVelvetleaf blueberryViola aduncaHook-spurred violet

Viola brittoniana Coast violet

Viola renifoliaKidney-leaf white violetWaldsteinia fragarioidesBarren strawberryXyris smallianaSmall's yellow-eyedZizia apteraGolden Alexanders

Sec. 2. Section 26-306-5 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-5. List of threatened species

(a) The following mammal species are determined to be threatened: None

(b) The following bird species are determined to be threatened:

Accipiter gentilis
Ammodramus maritimus

[Anas discors]

Northern goshawk
Seaside sparrow
[Blue-winged teal]

[(nesting population only)]

Ardea alba Great egret
Asio flammeus Short-eared owl

(wintering populations)

Charadrius melodus

Egretta thula

Falco peregrinus

[Falco sparverius]

Haematopus palliatus

Piping plover

Snowy egret

Peregrine falcon

[American kestrel]

American oystercatcher

Haliaeetus leucocephalus
Ixobrychus exilis
[Progne subis]
Sturnella magna
Bald eagle
Least bittern
[Purple martin]
Eastern meadowlark

Sternula antillarum Least tern

(c) The following reptile species are determined to be threatened:

Caretta caretta Loggerhead

Chelonia mydas Atlantic green turtle [Eumeces] Plestiodon fasciatus Five-lined skink

(d) The following amphibian species are determined to be threatened: Gyrinophilus porphyriticus

Northern spring salamander

Plethodon glutinosus Northern slimy salamander

(e) The following fish species are determined to be threatened: [Acipenser oxyrinchus oxyrinchus] [Atlantic sturgeon]

(f) The following invertebrate species are determined to be threatened:

Abagrotis nefascia benjamini Coastal heathland cutworm

Anthopotamus verticis
Apamea inordinata

Tusked sprawler
Apamea moth

[Apodrepanulatrix liberaria] [New Jersey tea inchworm]

Atylotus ohioensis Tabanid fly

Bombus terricola Yellow-banded bumble bee

Callophrys irus Frosted elfin

Calopteryx dimidiata Sparkling jewelwing [Celastrina neglectamajor] [Appalachian blue]

<u>Cicindela tranquebarica</u> <u>Dark-bellied tiger beetle</u>

Cordulegaster erronea Tiger spiketail

<u>Dargida rubripennis</u> <u>Pink streak</u>

Drasteria graphica atlantica False heather underwing

Enallagma doubledayi

Enallagma recurvatum

Erynnis brizo

Euchlaena madusaria

Eucosma morrisoni

Atlantic bluet

Pine barrens bluet

Sleepy duskywing

Scrub euchlaena

Morrison's mosaic

Eumacaria latiferrugataBrown-bordered geometer[Euphyes bimacula][Two-spotted skipper][Euxoa violaris][Violet dart moth]Exyra faxPitcher plant moth[Faronta rubripennis][Pink streak]

[Gomphus adelphus] [Mustached clubtail]
Gomphus descriptus Harpoon clubtail
Gomphus fraternus Midland clubtail
Gomphus quadricolor Rapids clubtail
Hemaris gracilis Slender clearwing
Hetaerina americana American rubyspot

[Hybomitra frosti][Horse fly]Hybomitra trepidaHorse flyHybomitra typhusHorse flyLapara coniferarumPine sphinx

Leucorrhinia glacialis Crimson-ringed whiteface

Merycomyia whitneyi Tabanid fly
Papaipema appassionata Pitcher plant borer

Papaipema duovata Seaside goldenrod stem borer

[Papaipema leucostigma] [Columbine borer]

Paraleptophlebia assimilis Mayfly

Phaneta clavana Lanced phaneta
Progomphus obscurus Common sanddragon

Psectraglaea carnosa Pink sallow

Pyrrhia aurantiagoAureolaria seed borerSchinia septentrionalisNorthern flower mothSomatochlora georgianaCoppery emeraldSperanza [exornata] exonerataBarrens itame

[Speyeria atlantis] [Atlantis fritillary butterfly]

Stylurus amnicola Riverine clubtail

Sympistis dentata Toothed apharetra moth

Tabanus fulvicallus Horse fly

Thaumatopsis edonis Grassland thaumatopsis

[Zale curema] [Noctuid moth] [Zale submediana] [Noctuid moth]

Zanclognatha martha [Noctuid moth] Pine barrens

zanclognatha

Zanclognatha theralis

Noctuid moth

(g) The following plant species are determined to be threatened:

Alopecurus aequalis [Orange foxtail] Short-awned meadow-foxtail

Andromeda polifolia var. glaucophylla
Anemone canadensis
Asplenium ruta-muraria
Betula pumila
[Bidens beckii]
Bog rosemary
Canada anemone
Wallrue spleenwort
Swamp birch
[Water-marigold]

[Bidens eatonii] [Water-marigold]

[Eaton's beggars-tick]

Calamagrostis stricta ssp. inexpansa Reed bentgrass

Carex alopecoidea Foxtail sedge
Carex crawei Crawe's sedge
Carex cumulata Clustered sedge
Carex davisii Davis' sedge

Carex limosa [Sedge] Mud sedge
[Castilleja coccinea] [Indian paintbrush]
Corydalis flavula Yellow corydalis

Eriophorum vaginatum var. spissum Hare's tail Eurybia spectabilis Showy aster

Gaylussacia [dumosa var.] bigeloviana Dwarf huckleberry [Helianthemum propinquum] [Low frostweed]

Houstonia longifolia Longleaf bluet

Hudsonia tomentosa [False]Woolly beach-heather

Ilex glabra Inkberry

(native populations only)

Krigia biflora Two-flowered cynthia

Lipocarpha micrantha Dwarf bulrush

Maianthemum trifolium Three-leaved false Solomon's-seal

[Minuartia glabra][Mountain sandwort]Myriophyllum sibiricumNorthern water-milfoil[Ophioglossum pusillum][Adder's-tongue][Packera paupercula][Ragwort]

Panicum amarum var. amarum [Panic grass]Bitter panicgrass

Paspalum laeveField paspalumPedicularis lanceolataSwamp lousewortPetasites frigidus var. palmatusSweet coltsfoot

[Platanthera ciliaris] [Yellow-fringed orchid]
Polygala nuttallii Nuttall's milkwort
Populus heterophylla Swamp cottonwood

Rhododendron groenlandicum Labrador tea

Rhynchospora macrostachya [Beaked rush]<u>Tall beaksedge</u>

Rotala ramosior Toothcup

[Salix exigua] [Sandbar willow] Schoenoplectus acutus Hard-stemmed bulrush

Schoenoplectus torreyi Torrey bulrush
Senna hebecarpa Wild senna

Sibbaldiopsis tridentata Three-toothed cinquefoil Silene stellata Starry [champion]campion

Spergularia canadensis

Canada sand-spurry
Sporobolus cryptandrus

Sand dropseed

<u>Stachys hispida</u>

Streptopus amplexifolius

Thuja occidentalis

Canada sand-spurry

Sand dropseed

<u>Hispid hedge-nettle</u>

White mandarin

Northern white cedar

(native populations only)

Trollius laxus Spreading globe flower Viburnum prunifolium Smooth black-haw

Xyris montana Northern yellow-eyed grass

Sec. 3. Section 26-306-6 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-6. List of species of special concern

(a) The following mammal species are determined to be species of special concern:

*Canis lupus Gray wolf

Lasionycteris noctivagans Silver-haired bat

Lasiurus borealis Red bat Lasiurus cinereus Hoary bat

[*Myotis leibii] [Eastern small-footed bat]

*Neotoma magister Eastern woodrat Phocoena phocoena <u>ssp.phocoena</u> Harbor porpoise *Puma concolor couguar Eastern cougar

Synaptomys cooperi Southern bog lemming

*Believed Extirpated

(b) The following bird species are determined to be species of special concern:

Aegolius acadicus Northern saw-whet owl

Ammodramus caudacutus Saltmarsh sharp-tailed sparrow

*Ammodramus henslowii Henslow's sparrow
Buteo platypterus Broad-winged hawk
Caprimulgus vociferus Whip-poor-will

Dolichonyx oryzivorus Bobolink

Egretta caerulea

Empidonax alnorum

Falco sparverius

Gavia immer

Little blue heron

Alder flycatcher

American kestrel

Common loon

*Numenius borealis Eskimo curlew

Nyctanassa violacea Yellow-crowned night-heron

[Parula americana] [Northern parula]
Passerculus sandwichensis Savannah sparrow
Passerculus sandwichensis ssp. princeps Ipswich sparrow

(wintering population)

Plegadis falcinellusGlossy ibisProgne subisPurple martinSetophaga americanaNorthern parulaSetophaga ceruleaCerulean warblerSterna hirundoCommon tern

[Sturnella magna] [Eastern meadowlark]

Toxostoma rufum Brown thrasher

*Believed Extirpated

(c) The following reptile species are determined to be species of special concern:

<u>Clemmys guttata</u> <u>Spotted turtle</u> Glyptemys insculpta Wood turtle

Heterodon platirhinos Eastern hognose snake

<u>Malaclemys terrapin terrapin</u> <u>Northern diamondback terrapin</u>

[Liochlorophis] OpheodrysVernalisSmooth green snakeTerrapene carolina carolinaEastern box turtleThamnophis sauritusEastern ribbon snake

(d) The following amphibian species are determined to be species of special concern:

Ambystoma jeffersonianum Jefferson salamander "complex" Ambystoma laterale Blue-spotted salamander "complex"

Necturus maculosus Mudpuppy

Rana pipiens Northern leopard frog

(e) The following fish species are determined to be species of special concern:

Alosa aestivalis Blueback herring Carcharias taurus Sand tiger shark Catostomus catostomus Longnose sucker Slimy sculpin Cottus cognatus Banded sunfish Enneacanthus obesus Liparis atlanticus Atlantic seasnail Notropis bifrenatus Bridle shiner Ulvaria subbifurcata Radiated shanny

(f) The following invertebrate species are determined to be species of special concern:

*Acronicta albarufa Barrens dagger moth
Acronicta falcula Corylus dagger moth
Acronicta fragilis Fragile dagger moth

*Acronicta lanceolaria [Noctuid moth] Pointed dagger moth

Carabus vinctus

Agonum darlingtoni Ground beetle
Agonum mutatum Ground beetle
Agrotis stigmosa Spotted dart moth
Amara chalcea Ground beetle
[Anthopotamus verticis] [Tusked sprawler]
[Apamea burgessi] [Apamea moth]
[Apamea inordinata] [Apamea moth]

Apamea lintneri [Apamea moth] Sand wainscot moth

Argyrostrotis anilis Short-lined chocolate

[Atylotus ohioensis] [Tabanid flv] Badister transversus Ground beetle Bembidion carinula Ground beetle Bembidion lacunarium Ground beetle Bembidion planum Ground beetle Bembidion pseudocautum Ground beetle Bembidion quadratulum Ground beetle Bembidion semicinctum Ground beetle Bembidion simplex Ground beetle

<u>*Bombus affinis</u> [Affable bumblebee] <u>Rusty-patched bumble bee</u> *Bombus ashtoni Ashton's [bumblebee] <u>cuckoo bumble bee</u>

Ground beetle

[Bombus terricola] [Yellowbanded bumblebee]

Brachinus cyanipennis Bombardier beetle Brachinus fumans Bombardier beetle Brachinus medius Bombardier beetle Brachinus ovipennis Bombardier beetle Brachinus patruelis Bombardier beetle Callophrys henrici Henry's elfin *Callophrys polios Hoary elfin [*Calosoma wilcoxi] [Ground beetle] Cambarus bartonii Common crayfish [*]Carabus serratus Ground beetle [*Carabus sylvosus] [Ground beetle]

Catocala badia badiaBay underwing moth*Catocala pretiosa pretiosaPrecious underwing mothChaetaglaea cerata[Noctuid moth] Waxed sallow

*Chlosyne harrisii Harris' checkerspot *Chlosyne nycteis Silvery checkerspot

*Cicindela dorsalis dorsalis

Cicindela formosa generosa

Cicindela hirticollis

Cicindela marginata

(Tiger] Saltmarsh tiger beetle

(Tiger] Purple tiger beetle

(Cicindela tranquebarica)

Northeastern beach tiger beetle

[Pine barrens] Big sand tiger beetle

[Tiger] Hairy-necked tiger beetle

[Tiger] Saltmarsh tiger beetle

[Tiger] Purple tiger beetle

[Dark-bellied tiger beetle]

*Citheronia regalis Regal moth

[*]Coccinella novemnotata [C9]Nine-spotted lady beetle

Crangonyx aberrans Mystic Valley amphipod
*Cucullia speyeri [Noctuid moth] Speyer's paint

Derrima stellataPink star mothDichagyris acclivisNoctuid mothDigrammia equivocataEquivocal looper*Drasteria occultaDrasteria moth[*]Eacles imperialis imperialisImperial mothEnallagma daeckiiAttenuated bluet

Enallagma daeckiiAttenuated blueEnallagma minusculumLittle bluetEnallagma pictumScarlet bluet

Erynnis horatius Horace's duskywing
*Erynnis martialis Mottled duskywing
[Euchlaena madusaria] [Scrub euchlaena]
[Eucoptocnemis fimbriaris] [Noctuid moth]
*Eulimnadia agassizii Clam shrimp

[Eumacaria latiferrugata] [Brown-bordered geometer]

Euphyes dion Sedge skipper

Euxoa pleuritica [Noctuid] Fawn brown dart moth

Euxoa violaris

[Exyra fax]

Fagitana littera

Violet dart moth

[Pitcher plant moth]

Marsh fern moth

*Fossaria galbana [Lymnaeid snail] <u>Boreal fossaria</u>

Fossaria rustica
Geopinus incrassatus

*Glena cognataria
Gomphus adelphus
Gomphus vastus
Gomphus ventricosus
Goniops chrysocoma

Lymnaeid snail
Ground beetle
Blueberry gray moth
Mustached clubtail
Cobra clubtail
Horse fly

Gyraulus circumstriatus [Aquatic snail] Disc Gyro

Harpalus caliginosus

Harpalus [eraticus] erraticus

Helluomorphoides praeustus bicolor

Hybomitra frosti

Horse fly

Horse fly

Hybomitra [luridus] <u>lurida</u>

[Hybomitra trepida]

[Hybomitra typhus]

Horse fly

[Horse fly]

*Hydraecia immanis Hop vine borer moth Hyparpax aurora Pink prominent

Ladona deplanata Blue corporal dragonfly

[Lepipolys perscripta][Noctuid moth]Leptodea ochraceaTidewater mucketLethe eurydiceEyed brown

Ligumia nasuta Eastern [pond mussel] pondmussel

[*]Lithophane lemmeri Lemmer's noctuid moth [*]Lithophane viridipallens Pale green pinion moth

Lomamyia flavicornis Yellow-horned beaded lacewing *Lordithon niger Black lordithon rove beetle

Loxandrus vulneratus Ground beetle
Lycaena epixanthe Bog copper
Lycaena hyllus Bronze copper

Macropis ciliataFringed loosestrife oil-beeMargaritifera margaritiferaEastern [pearl shell] pearlshellMelitara prodenialisEastern cactus-boring moth

Meropleon ambifuscum Newman's brocade [Merycomyia whitneyi] [Tabanid fly]

Metarranthis apiciaria Barrens metarranthis moth

*Mixogaster johnsoni Syrphid fly Nebria lacustris Ground beetle

*Nicrophorus americanus American burying beetle

[*Omophron tesselatum][Ground beetle][Oncocnemis riparia][Dune oncocnemis][*Panagaeus fasciatus][Ground beetle]*Papaipema circumlucensHops-stalk borer moth

[Papaipema duovata] [Seaside goldenrod stem borer]
*Papaipema maritima Maritime sunflower borer moth
*Papaipema sciata Culvers root [bore] borer moth

[Paraleptophlebia assimilis] [Mayfly]

<u>Parasa indetermina</u> <u>Stinging rose caterpillar moth</u>

Photedes inopsSpartina borer moth[*Polygonia progne][Gray comma]Pomatiopsis lapidariaSlender walker[Procambarus acutus][Whiteriver crayfish]*Pyreferra ceromaticaAnnointed sallow moth[Rhodoecia aurantiago][Aureolaria seed borer]

[Sargus fasciatus] [Soldier fly]
[Satyrodes eurydice] [Eyed brown]
[*Scaphinotus elevatus] [Ground beetle]
Scaphinotus viduus Ground beetle

Schinia spinosae [Noctuid] <u>Apinose flower moth</u>

*Sideridis maryx Maroonwing moth
Somatochlora elongata Ski-tailed emerald
[Spartiniphaga inops] [Spartina borer moth]
*Speyeria idalia Regal fritillary

Sphodros niger Purse web spider

Stagnicola catascopium [Lymnaeid snail] Woodland pondsnail

Stonemyia isabellina Tabanid fly

Stygobromus tenuis Piedmont groundwater amphipod

<u>Sympistis perscripta</u> <u>Scribbled sallow moth</u> Sympistis riparia <u>Dune Sympistis</u>

Synurella chamberlaini Coastal pond amphipod

[Tabanus fulvicallus] [Horse fly]

[Tetragonoderus fasciatus] [Ground beetle]

[Tibicen auletes] [Cicada]

Valvata sincera Boreal turret snail
Valvata tricarinata Turret snail

Zale obliqua [Noctuid moth] Oblique zale

*Zale submediana Gray spring zale

*Believed Extirpated

(g) The following plant species are determined to be species of special concern:

Acalypha virginica

*Amaranthus pumilus

Anemone acutiloba

*Angelica venenosa

*Antennaria howellii ssp. petaloidea

Virginia copperleaf

Sea-beach amaranth

Sharp-lobed hepatica

Hairy angelica

Field pussytoes

*Aplectrum hyemale Puttyroot

*Arethusa bulbosa [Arethusa]<u>Dragon's-mouth</u>

Aristida longespica <u>var. geniculata</u>
[Aristida purpurascens]
[Aristolochia serpentaria]
[Virginia snakeroot]
Asclepias purpurascens

*Asclepias variegata
Asplenium montanum
Atriplex glabriuscula

Needlegrass
[Arrowfeather]
[Virginia snakeroot]
Purple milkweed
White milkweed
[Orache] Bracted orache

[Betula pumila] [Swamp birch]

<u>Bidens beckii</u>
*Blephilia ciliata

Beck's water-marigold
Downy wood-mint

*Blephilia hirsuta Hairy [woodmint]wood-mint

Bolboschoenus maritimus ssp. paludosus
Bolboschoenus novae-angliae
*Botrychium simplex

[Calamagrostis stricta ssp. inexpansa]

Bayonet grass
Salt marsh bulrush
Little grape fern
[Reed bentgrass]

*Calystegia silvatica Short-stalked false bindweed

*Calystegia spithamaea Low bindweed
Cardamine douglassii Purple cress
Carex aestivalis Summer sedge
Carex aquatilis [var. aquatilis]ssp. altior
Carex bushii [Sedge] Water sedge
[Sedge] Bush's sedge
*Carex collinsii [Collins] Collins' sedge

*Carex crawfordii Crawford sedge
[*]Carex foenea Bronze sedge
Carex formosa Handsome sedge
Carex hitchcockiana Hitchcock's sedge
Carex molesta Troublesome sedge
*Carex nigromarginata Black-edge sedge

Carex novae-angliae
Carex oligocarpa

New England sedge
Eastern few-fruited sedge

*Carex oligosperma Few-seeded sedge *Carex pauciflora Few-flowered sedge

Carex prairea Prairie sedge [Carex squarrosa] [Sedge]

Carex sterilis Dioecious sedge

Carex trichocarpa [Sedge] <u>Hairy-fruited sedge</u>
Carex tuckermanii Tuckerman's sedge
Carex typhina [Sedge] <u>Cattail sedge</u>

Carex typhina[Sedge] Cattail sedgeCelastrus scandensAmerican bittersweet[*Cercis canadensis][Eastern redbud]

*Colegateria longifolia con elongata [(native populations only)]

*Colegateria longifolia con elongata [Coast blite] Red goosefoot

*Colegateria longifolia con elongata [Long leaved redton paniograss]

*Coleataenia longifolia ssp. elongata Long-leaved redtop-panicgrass
Corallorhiza trifida Early coral root

*Crocanthemum dumosum
Crocanthemum propinquum
[*Croton willdenowii]

*Crotonopsis elliptica

*Cuphea viscosissima

*Cuscuta corvli

*Bushy frostweed
Low frostweed
[Elliptical rushfoil]
Elliptical rushfoil
Blue waxweed

*Cuscuta corvli

Hazel dodder

*Cuscuta coryli Hazel dodder *Cynoglossum virginianum Wild comfrey

*Cypripedium arietinum Ram's-head lady's-slipper Cypripedium parviflorum Yellow lady's-slipper

Deschampsia [caespitosa] Cespitosa Tufted hairgrass
Desmodium glabellum Dillenius' tick-trefoil
*Desmodium sessilifolium Sessile-leaf tick-trefoil

Dicentra canadensis Squirrel corn
[Dichanthelium ovale var. addisonii] [Panic grass]

<u>*Dichanthelium ovale ssp.</u> <u>Stiff-leaved rosette-panicgrass</u>

<u>pseudopubescens</u>

*Dichanthelium sphaerocarpon var. [Panic grass]Round-fruited rosette-panicgrass isophyllum

*Dichanthelium xanthophysum [Panic grass]Pale-leaved rosette-panicgrass [Diospyros virginiana] [Persimmon]

[Diospyros virginiana] [Persimmon]
*Doellingeria infirma Appalachian white-aster

Draba reptans Whitlow-grass
*Drosera filiformis Thread-leaf sundew
Drymocallis arguta Tall cinquefoil
Dryopteris goldiana Goldie's fern

*Eleocharis microcarpa var. filiculmis [Spike-rush]Small-fruited spikesedge

Elymus wiegandii Wiegand's wild rye Endodeca serpentaria Virginia snakeroot *Equisetum palustre [Eurybia X herveyi] *Gamochaeta purpurea Gaultheria hispidula *Geranium bicknellii

*Goodyera repens var. ophioides

[*Helianthemum dumosum]
[Hepatica nobilis var. acuta]
*Heteranthera reniformis
Honckenya peploides

Hottonia inflata

*Huperzia [selago]appressa *Hybanthus concolor Hydrophyllum virginianum *Hypericum adpressum Hypericum ascyron *Juncus debilis

[Krigia biflora]

*Lechea racemulosa
Lespedeza repens

Liatris [scariosa var.] novae-angliae

Lilaeopsis chinensis Limosella australis *Linum intercursum [Liquidambar styraciflua]

*Ludwigia polycarpa Lycopus amplectens Lygodium palmatum *Lyonia mariana *Malaxis bayardii

Mitella nuda
*Nuphar advena
*Nuphar microphylla
*Oenothera fruticosa

Opuntia humifusa
Orontium aquaticum
*Orthilia secunda

Oxalis violacea
Panax quinquefolius

[*Panicum rigidulum var. elongatum]

*Panicum verrucosum *Paronychia fastigiata

*Paspalum setaceum var. psammophilum

Marsh horsetail [Hervey's aster] Purple cudweed Creeping snowberry

Bicknell's northern crane's-bill Dwarf rattlesnake plantain

[Bush rockrose]

[Sharp-lobed hepatica] Kidneyleaf mud-plantain

Seabeach sandwort

Featherfoil
Fir clubmoss
Green violet

Virginia waterleaf

Creeping St. John's-wort Great St. John's-wort

Weak rush

[Two-flowered cynthia]

Illinois pinweed
Creeping bush-clover

[Blazing star]New England blazing-star

Lilaeopsis Mudwort Sandplain flax [Sweet gum]

[(native populations only)] Many-fruited false-loosestrife Clasping-leaved water-horehound

Climbing fern Stagger-bush

Bayard's white adder's mouth

Naked miterwort Large yellow pond lily Small yellow pond lily

Sundrops

Eastern prickly pear

Golden club
One-sided pyrola
Violet wood-sorrel
American ginseng
[Tall flat panic-grass]
Warty panic grass
Hairy forked chickweed

[Bead grass]Thin paspalum

*Phaseolus polystachios var. Wild kidney bean

polystachios

Phragmites americanusAmerican reedPlantago virginicaHoary plantain

*Platanthera dilatata Tall white bog orchid Platanthera flava var. herbiola Pale green orchid *Platanthera hookeri Hooker's orchid

*Platanthera orbiculata Large round-leaved orchid

[Podostemum ceratophyllum] [Threadfoot]
*Polanisia dodecandra Clammy-weed
Polygala ambigua Alternate milkwort
[*]Polygonum glaucum Seabeach knotweed
[Potentilla arguta] [Tall cinquefoil]
*Prunus alleghaniensis Alleghany plum
*Prunus maritima var. gravesii Grave's beach plum

*Puccinellia [tenella ssp. alaskana]<u>pumila</u> Goose grass Quercus macrocarpa Bur oak

*Ranunculus flammula var. [filiformis] Creeping spearwort

reptans

[Ranunculus longirostris] [White water-crowfoot]

[*]Ranunculus pensylvanicus Bristly buttercup

*Rhus aromatica Fragrant sumac (native populations only)

Ribes glandulosum Skunk currant

*Ribes lacustre Swamp black current

Ribes rotundifolium Wild currant *Rosa nitida Shining rose

Rubus cuneifolius Sand [bramble]blackberry

*Rumex [maritimus]persicarioides Sea-side dock *Sabatia dodecandra Large marsh pink

Sagittaria subulata [Arrowleaf]Awl-leaved arrowhead

Salix petiolaris Slender willow [Salix serissima] [Autumn willow]

Schizachne purpurascens

*Schwalbea americana

*Scirpus georgianus

*Scirpus longii

*Scleria verticillata

[Senna hebecarpa]

*Smilax hispida

Purple oat

Chaffseed

Chaffseed

Long's bulrush

Long's bulrush

Low nutrush

[Wild senna]

Bristly greenbriar

*Solidago aestivalis Early wrinkle-leaved goldenrod

*Solidago latissimifolia Elliott's goldenrod

[*Solidago rugosa var. sphagnophila] [Early wrinkle-leaved goldenrod]

Spiranthes tuberosa var. grayi

[Stachys tenuifolia]

Little ladies'-tresses

[Smooth hedge-nettle]

Stellaria borealis

*Symphyotrichum prenanthoides

Trichomanes intricatum
*Trichophorum alpinum
[Trisetum spicatum]

*Vaccinium vitis-idaea ssp. minus

*Valerianella radiata
*Veratrum latifolium
*Verbena simplex
*Viburnum nudum

[Viburnum prunifolium]

[Viola adunca]
Viola canadensis
*Viola hirsutula
Viola nephrophylla
[*Viola renifolia]
Viola selkirkii
[*Viola striata]

[Vitis X novae-angliae]

Northern stitchwort Crooked-stem aster

Appalachian gametophyte [Cotton]Alpine bulrush [Spiked false oats] Mountain cranberry Beaked corn-salad Hybrid bunchflower Narrow-leaved vervain

Possum haw

[Smooth black-haw] [Hook-spurred violet]

Canada violet

Southern wood violet Northern bog violet

[Kidney-leaf white violet]

Great-spurred violet [Striped violet]

[New England grape]

Public Comments Received and the Department's Responses

Comment: Three members from the Connecticut Falconers Association expressed concern that the Northern goshawk (*Accipiter gentilis*) has been added to the list of threatened species, and because of this designation will no longer be allowed as a falconry bird in Connecticut. They requested specific information and/or data as to the justification for listing the Northern goshawk as a threatened species.

Response: The DEEP's Wildlife Division consults with experts from around the State to review and revise the list of endangered, threatened, and special concern species. Based on surveys and declining extant populations, the bird working group submitted a petition to add the Northern goshawk to the list of threatened species. Call back surveys were conducted between 2005-2008 using methods developed by Fuller and Mosher (1981) and refined by DEEP to estimate the abundance and distribution of Northern goshawks statewide. Surveys were conducted with a five-minute silent observation period, followed by a five minute intermittent broadcast of great horned owl vocalizations. Surveyors were instructed to play call back if any raptor was observed during 5 minute silent period, to avoid unnecessary disturbance. Surveys were conducted around the State six times between March and July each. Analysis of survey techniques demonstrated that detection probability for Northern goshawk for each survey visit was 40-60%. With 6 repeated visits each year, probability of detection over the course of each survey year was 97-100%. Over the course of the 4 years of surveys 488 survey points at least 181 independent sites were visited at least one year. Survey points were spread across 162 Breeding Bird Atlas

^{*}Believed Extirpated

Blocks (Bevier 1994 for blocks).

Survey locations were primarily selected, but influenced by ability to access land. Therefore, State land has the highest percentage due to ease of access and prior knowledge of habitat types. (Table 1) Collectively these properties were then evaluated by land use. (Table 2) Considering that 60% of the survey locations were State land, accounts for 61% being open to the public or light recreational use, and chosen because the recreational and disturbed aspects were less of an issue.

Considering that Northern goshawks preferred habitat that is mature woodlands with areas near clearings and the forest edge, the range of forest patch acres was an important element of the survey. (Table 3) The areas were then refined with percent of canopy and coniferous forest cover. (Tables 4 and 5) Canopy cover and forest cover data were collected through visual estimation by trained surveyors at each point location. Also considering that Northern goshawks prefer large trees and a high canopy closure with an open understory, the 67% of canopy of 50 to over 80%, increased the possibility to locate these raptors.

Between 2005 through 2008, 319 sites (consisting of multiple points per site) were surveyed. Northern goshawks were observed at least once at 6%, 3.6%, 1.1%, and 0% of sites at least once at 6%, 3.6%, 1.1%, and 0% of sites in 2005-2008 respectively. Results of the survey note only two sites with a confirmed nest, all other observations were restricted to one observation in one year, with no evidence of nesting. (Table 6)

Results of the surveys were compared to the Connecticut Breeding Bird Atlas (Bevier 1994). The percent of blocks with any recorded observation of Northern goshawk in the 2005-2008 surveys were compared to the percent of blocks with any recorded observation of Northern goshawk in the Breeding Bird Atlas. This comparison demonstrated a rapidly declining (approximately 50 percent decline) of the Northern goshawk population. In 1982-1986, the Breeding Bird Atlas had occurrences in 14 percent of survey blocks. (Bevier 1994), whereas Woodland Raptor Surveys, conducted in 2005-2008, returned observations in only 7 percent of equivalent atlas blocks visited (23/162). Additionally, estimated site occupancy incorporating detection probability estimated that only 5 percent of the sites surveyed were occupied, and occupancy declined over the course of the surveys. (The complete petition is attached.)

Ownership	Percent of Survey Points		
State	60%		
Private	20%		
County/Town	11%		
Unknown	4%		
Tribal	3%		
Other	2%		

Table 1. Survey locations by percentage of ownership

Land Use Around Survey Point	Percent of Survey Points	
Light Recreation	61%	
Undisturbed	17%	
Heavy Recreation	7%	
Partially Cut	5%	
Unknown	5%	
Commercial Forest	1%	
Grazed	1%	
Water Company	1%	

Table 2. Land us of survey areas

Acres of Forest Patch with Survey Point	Percent of Survey Points	
<20	35%	
20-50	3%	
50-100	1%	
100-200	1%	
300-500	3%	
500-1000	3%	
1000-1500	2%	
>2000	6%	
unknown	45%	

Table 3. Forest Patch Size

Percent Total Canopy Cover	Percent of Survey Points	
<5%	7%	
10-30%	9%	
30-50%	17%	
50-80%	39%	
>80%	28%	

Table 4. Percent of Canopy Cover

Percent of	Percent of Survey	
Coniferous Forest	Points	
Cover		
0%	38%	
5-20%	36%	
20-50%	13%	
50-75%	10%	
75-95%	3%	
100%	1%	

Table 5. Percent of Coniferous Forest Cover

Year	Number of Independent Survey Sites*	Raw Percent Sites Occupied	Corrected Percentage Sites Occupied
2005	54	6.0%	6.7%
2006	55	3.6%	3.8%
2007	181	1.1%	n/a
2008	29	0.0%	n/a

Table 6.Results of surveys
*Sites may consist of 1-11 survey points spaced at least ½ mile

Recommended wording: As proposed.

Comment: The group that worked on reviewing the invertebrates has recommended additional changes to the list as noted:

Spelling edits:

Harpalus [eraticus] <u>erraticus</u> Hybomitra [luridus] <u>lurida</u>

Status change:

Remove "Believed Extirpated" symbol (*) for Coccinella novemnotata SC*

Response: The DEEP Wildlife Division agrees with the technical changes as recommended.

Recommended wording: Revised.

Hearing Officer's Recommendations

The hearing officer has reviewed all comments received at the March 31, 2015 public hearing and all written comments received as of 4:30 p.m. by April 14, 2015. The Department received a total of three individualized written and/or verbal public comments regarding the proposed amendments. All issues of concern have been addressed in this document to my satisfaction. Based on review of the information and the aforementioned responses, the hearing officer recommends that the Commissioner of Energy and Environmental Protection proceed with the proposed amendment to the regulations governing Endangered, Threatened, and Special Concern Species.